



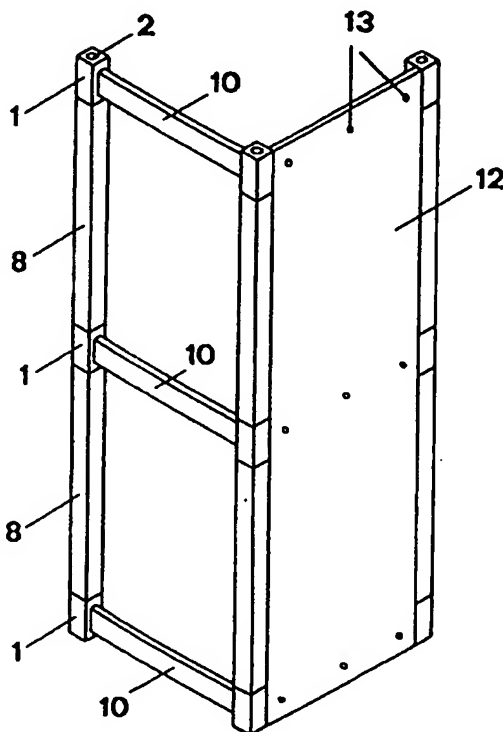
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : A47B 47/00, F16B 12/46	A1	(11) International Publication Number: WO 99/47024 (43) International Publication Date: 23 September 1999 (23.09.99)
(21) International Application Number: PCT/IT98/00061 (22) International Filing Date: 19 March 1998 (19.03.98) (71)(72) Applicant and Inventor: MANFREDINI, Benvenuto [IT/IT]; Via Aurelia, 1100, I-00166 Roma (IT). (74) Agent: MASCIOLI, Alessandro; Via Urbana, 20, I-00184 Roma (IT).	(81) Designated States: JP, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report.	

(54) Title: A MODULAR SYSTEM FOR COMPOSING FURNITURE AND SIMILAR

(57) Abstract

The modular system for composing furniture and similar according to the present invention mainly consists of: a plurality of elements for connection of the modules, like single, double or triple knots (1); a plurality of linear uprights (8), for the support and the structure of the manufactures, provided with means (9) for the linking to said knots (1), for realizing the supporting framework; a plurality of linear cross-pieces (10) that may be inserted into said knots (1), for the horizontal connection of said uprights (8); panels (12) that may be applied as pluggings, by means of guides (11) or similar, to the structures realized by means of said knots (1), uprights (8) and cross-pieces (10); fittings like corners and similar of known kind, for completing the manufactures.



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"A MODULAR SYSTEM FOR COMPOSING FURNITURE AND SIMILAR"

The present invention concerns a modular system for composing furniture and similar, that allows the realization of furniture, home and garden furniture installed according to the impulse of the users and that may be possibly developed in different and variable dimensions, in different time periods.

It is well known that all furniture, even the modular one, existing at present consist of prefabricated elements that may be installed according to definite project schemes.

It is the aim of the present invention to realize, with a plurality of modules, a system that allows the realization by the user of furniture according to his own impulse, as well as their reconversion according to his needs and tastes, by differently coupling the same elements and/or additional ones for the realization of different objects.

The aim set forth is reached by means of the modular system for composing furniture and similar according to the present invention, mainly consisting of:

- a plurality of elements for the connection of the modules, like single, double or triple knots;

- a plurality of linear uprights, for the support and the structure of the manufactures, provided with means for the linking to said knots, for realizing the supporting framework;
- a plurality of linear cross-pieces that may be inserted into said knots, for the horizontal connection of said uprights;
- panels that may be applied as pluggings, by means of guides or similar, to the structures realized by means of said knots, uprights and cross-pieces;
- fittings like corners and similar of known kind, for completing the manufactures.

The advantages of the present invention obviously consist in the possibility of developing the creativity together with the personalization of the projects, in the practicalness and quickness of installation of the modules and in their possible variation and re-utilization for obtaining different furniture and fittings.

The present invention will be described more in detail hereinbelow relating to the enclosed drawings in which some embodiments are shown.

Figures 1, 2, 3, 4 and 5 show axonometric and transparency views of five variants of a knot, respectively: without lateral joint means, with one single

blind joint means, with one passing-through joint, with two joints and with three orthogonal joints.

Figure 6 shows an axonometric view of the modular uprights of different lengths.

Figure 7 shows an axonometric view of three dimensional variants of linear cross-pieces.

Figure 8 shows a detail of the installation of a panel onto an orthogonal corner structure, for the realization of a piece of furniture or other manufacture.

Figure 9 shows a process for the application of the panels onto a corner structure, making use of guides applied to the uprights.

Figure 10 shows an example, in transparency view, of a possible table obtained by means of the connection of some of the modules described.

The enclosed figures show a modular system for composing furniture and similar, mainly consisting of:

- a connection knot 1, provided with two round blind holes 2, corresponding along the axis and provided on the upper and lower square sides, for housing connection cylinders 3;

- a connection knot 1, similar to the precedent one, but provided also with a blind opening 4, for the insertion of the ends of the cross-pieces;
- a knot 1 as described above, with a passing-through opening 5 for the linear insertion of cross-pieces;
- a knot 1 as described above, provided with orthogonal openings 6, for the linear insertion of cross-pieces;
- a knot 1 as described above, provided with three orthogonal openings 7 for the realization of linear and orthogonal connections;
- a plurality of uprights 8 of different lengths, provided with end holes 9 for the connection, by means of said cylinders 3, with the corresponding holes 2 of knots 1;
- a plurality of cross-pieces 10, preferably of different lengths;
- a plurality of guides 11 that may be applied to uprights 8 for the insertion and the sliding of panels 12, with different surfaces;
- a plurality of panels 12 that may be also directly applied to cross-pieces 10;
- realization fittings, like corner pieces and other.

Relating in detail to figure 8, infact, said panels 12 may be applied in a well known manner and by means of connections 13, to cross-pieces 10 or even inserted into guides 11, as shown in figure 9.

CLAIMS

1. A modular system for composing furniture and similar, for realizing home and garden furniture installed according to the impulse of the users and that may be possibly developed in different and variable dimensions, in different time periods, characterized in the following elements that may be composed in various ways:
 - a connection knot (1), provided with two round blind holes (2), corresponding along the axis and provided on the upper and lower square sides, for housing connection cylinders (3);
 - a connection knot (1), similar to the precedent one, but provided also with a blind opening (4), for the insertion of the ends of the cross-pieces;
 - a knot (1) as described above, with a passing-through opening (5) for the linear insertion of cross-pieces;
 - a knot (1) as described above, provided with orthogonal openings (6), for the linear insertion of cross-pieces;
 - a knot (1) as described above, provided with three orthogonal openings (7) for the realization of linear and orthogonal connections;
 - a plurality of uprights (8) of different lengths, provided with end holes (9) for the connection, by means of said cylinders (3), with the corresponding holes (2) of knots (1);

- a plurality of cross-pieces (10), preferably of different lengths;
 - a plurality of guides (11) that may be applied to uprights (8) for the insertion and the sliding of panels (12), with different surfaces;
 - a plurality of panels (12) that may be also directly applied to cross-pieces (10);
 - realization fittings, like corner pieces and other.
2. A system according to claim 1, characterized in that said panels (12) are applied to said cross-pieces (10) by means of connections (13).
3. A system according to claim 1, characterized in that said panels (12) are inserted into guides (11).

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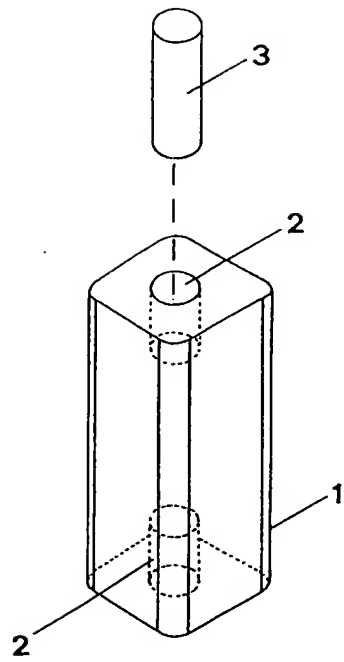


FIG. 1

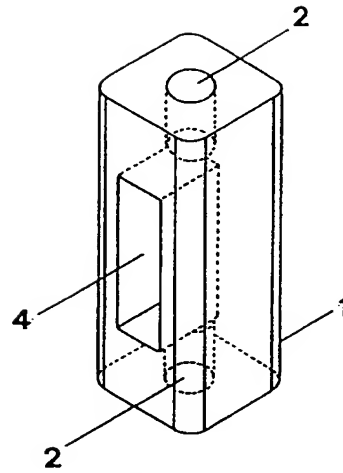


FIG. 2

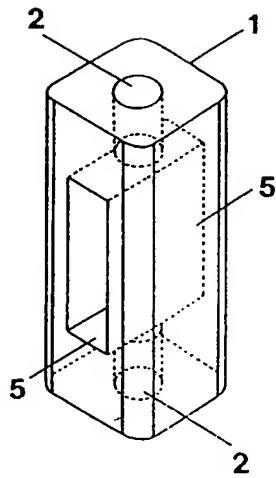


FIG. 3

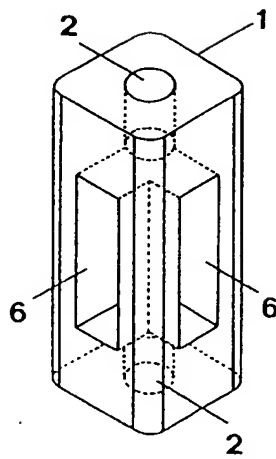


FIG. 4

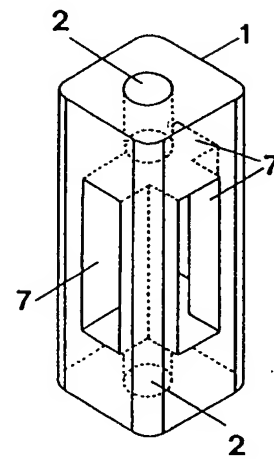


FIG. 5

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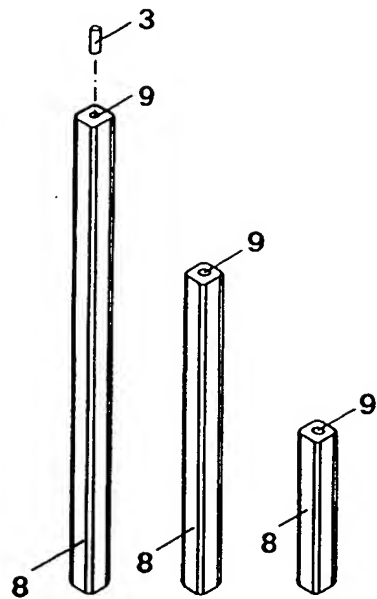


FIG. 6

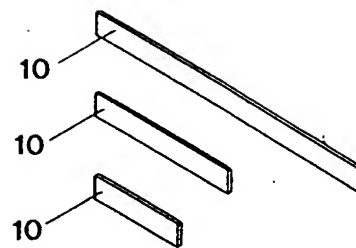


FIG. 7

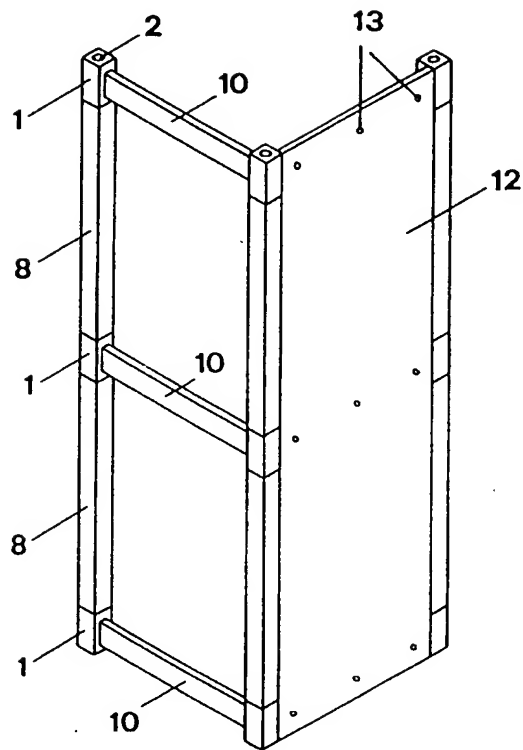


FIG. 8

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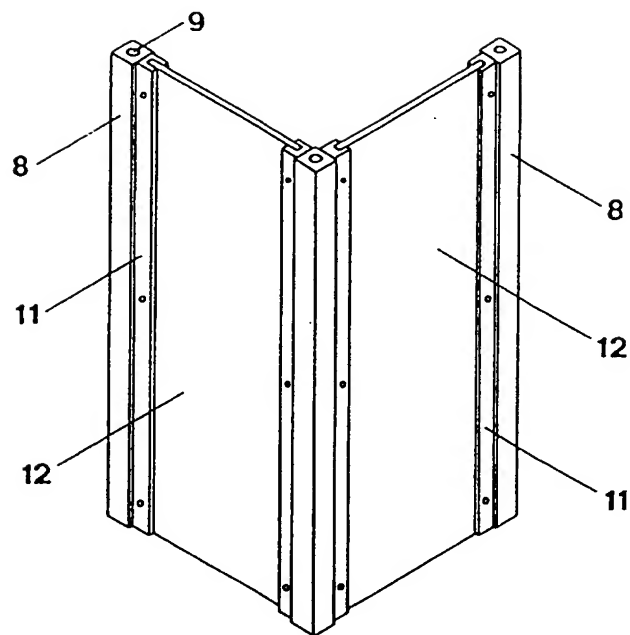


FIG. 9

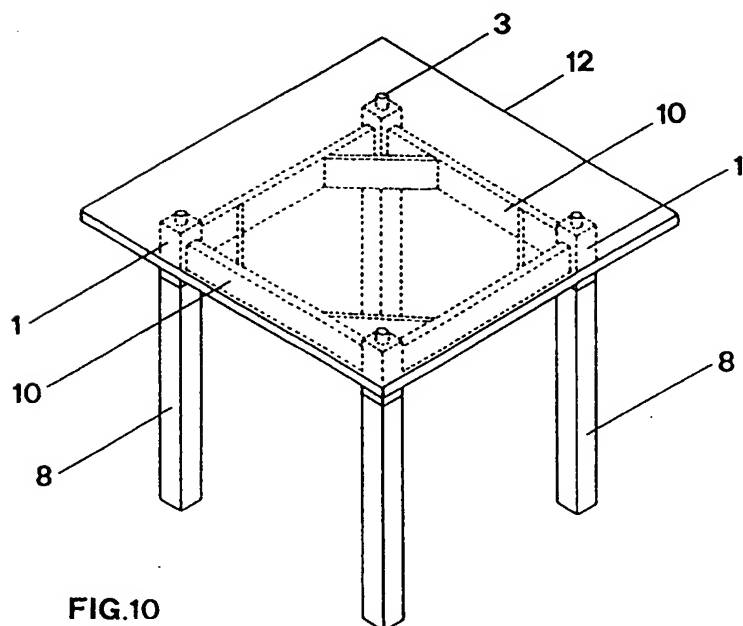


FIG. 10

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IT 98/00061

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 A47B47/00 F16B12/46

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 A47B F16B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 43 35 252 A (RAMM) 20 April 1995 see the whole document	1-3
Y	FR 2 675 549 A (FORMES NOUVELLES) 23 October 1992 see the whole document	1
Y	WO 94 04771 A (AURICH) 3 March 1994 see figures 1,8A-B	1

☐ Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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Date of the actual completion of the international search

11 January 1999

Date of mailing of the international search report

19/01/1999

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information on patent family members

Int. Application No

PCT/IT 98/00061

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